Paleontology should form an inseparable part of biology and should not be taught under geology except in its stratigraphic relations. Fossil types should be studied in connection with their ancestors and their nearest living relatives.

The pendulum has swung too far in the direction of exclusive microscopic and physiologic work. When it swings back (and I believe the time is not far distant) the equilibrium will be restored — the perverted meaning of the term "biology" will be forgotten, and the present one-sided study of animals and plants will give place to a rational biology and to the development of a school of naturalists far in advance of those who have passed away.

## NOTES ON PENNSYLVANIA GERMAN FOLK-MEDICINE.

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WHILE collecting material relating to the folk-lore of the Pennsylvania Germans I obtained some curious beliefs pertaining to the rattlesnake, and the alleged remedies employed for curing those bitten by this reptile. Many newspaper reports are annually circulated in various portions of the Atlantic Coast States to the effect that the reporter had discovered a veritable "mountain doctor," well versed in the secret properties of plants, and that this personage was widely celebrated for his wonderful skill in curing rattlesnake bites, but that the remedy was preserved with the utmost care as a great and valued secret; or, perhaps, that the reporter of the article had received a sample, but through some unavoidable misfortune he had lost it, etc.

Having consulted with some of these so-called "mountain doctors" to obtain and exchange matters of interest — during the past twenty years — it has been found that nearly all of them employ numerous species of plants for the ills that come under their observation, but that only a few are really acknowledged as possessing a semblance of skill, and still less who are familiar with so-called snake-bite remedies.

The plant employed by one of these "mountain pow-wows," and the only one claimed to possess any virtue, is *Sanicula marylandica*, or sanicle, termed by the natives "master-root," because it "masters the rattlesnake venom." The fresh plant and roots are pounded and soaked in boiling milk, when the mixture is applied to the wound as a poultice. A decoction of the same plant is also taken internally to induce diaphoresis. The decoction is said to be more efficacious if made with milk instead of water. I believe this to be the first instance of bringing this plant to public attention, at least as employed by these superstitious herbalists, and for the purpose stated; but as so much stress is placed upon the good results, even by people of recognized intelligence and education, it might not be amiss to have made a series of chemical and therapeutic experiments to test the efficacy of the remedy.

Another remedy employed by the superstitious of the mountain regions of middle and eastern Pennsylvania is to cut a live chicken in two, and to place the warm, raw surface of one part upon the part bitten by the snake.

Rattlesnakes are of value to the mountain doctors for several reasons. The oil, obtained by draining the reptile after skinning is used to cure deafness. The rattle, suspended from a string, and worn by a baby, will have the power of preventing the wearer from having convulsions during dentition. The tongue of the snake, when worn in the glove, will have the power of compelling any girl, who grasps the gloved hand, to love the one so greeted, even should she ordinarily be indifferent to his attentions.

Finally, to secure rattlesnakes, the "doctor" grasps a silk handkerchief at one corner, and allowing the other end to hang toward the serpent, teases her until she strikes it with her fangs, when he immediately raises the handkerchief from the ground, thus depriving the snake of any opportunity of disengaging herself therefrom, as the slightly recurved fangs are hooked in the material. The "doctor" then either kills the serpent by first grasping her neck with the disengaged hand, so as to prevent her biting him, when he cuts off her head. Should he desire, however, to keep the snake as a curiosity or for sale, he will extract the fangs with a small pair of forceps.

## NOTES AND NEWS.

PROFESSOR RICHARD A. PROCTOR, the well-known astronomer and writer, died in 1889, of yellow fever, in New York City. His children were in Florida at the time, and could not be present at the funeral. No suggestion of a resting-place being forthcoming, the astronomer's remains were buried in the undertaker's private lot in Greenwood. The body, it was understood, was to remain there until other arrangements could be made. The lot was in an out-of-the-way part of the cemetery, and the grave was neglected, there being not even a stone to mark the place. The children of the astronomer are all making their own living, and while their wish was to bury their father better, the means were not at hand. Recently, through the efforts of Mr. Edward W. Bok, attention has been called to the matter, and Mr. George W. Childs of Philadelphia, has, with his usual generosity, purchased a lot in Greenwood, near the Flatbush entrance, to which the astronomer's remains will be removed, and in October it is hoped that a suitable sarcophagus of granite will be dedicated with due ceremony.

— The U. S. National Museum has recently come into possession of a very remarkable collection of petrified trunks of an extinct species of tree belonging to a family of plants that is now very rare, but which once formed a prominent feature of the landscape of nearly all countries. These plants are intermediate in appearance between tree-ferns and palms, and have as their best known living representative the common sago-palm, *Cycas revoluta*, of our greenhouses. The fossil trunks above mentioned are from one to three feet in height and from six inches to two feet in diameter. They are in a very perfect state of preservation, turned to solid stone of a brown color. The largest one weighs 900 pounds, and is the largest object of the kind ever reported from any part of the world. They were found lying on the surface of the ground in the vicinity of Hot Springs, South Dakota, and were all sent to Washington by mail under the frank of the Interior Department. The geological formation in which they occurred is not known with certainty, but this class of plants reached its greatest perfection in what is known as Secondary, or Mesozoic time. It is therefore altogether probable that these trunks grew at that remote age and have lain strewn over the plains for millions of years waiting for science to gather them in and make them help tell the story of the earth. They have been placed in the Department of Fossil Plants, in charge of Prof. Lester F. Ward, who recently superintended the taking of fifteen views of them by the accomplished photographer of the National Museum, Mr. T. W. Smillie. This is one of the most important accessions the museum has received of late, and when the collection is elaborated and the results published it will make a valuable contribution to science.

— At Denison University, Granville, Ohio, a new scientific building, known as Barney Hall, is approaching completion. The building, which is one of the most substantial scientific buildings in the West, will cost when finished about $65,000, and will include chemical and physical laboratories, as well as a museum and laboratories of biology. Special attention is to be devoted to neurology and comparative neurology. An extended graduate course in biology, and a number of fellowships have been provided with corresponding increase in faculty.

— "The Story of My Life," by Dr. Georg Ebers, is the title of a delightful autobiography, full of fascinating reminiscences, which will be published immediately by D. Appleton & Co. This autobiography tells of Dr. Ebers's student life in Germany, his association with movements like that for the establishment of kindergarten training, his acquaintance with distinguished men like Froebel and the brothers Grimm, his glimpses of revolutionary movements, his interest in Egyptology and the history of ancient Greece and Rome, and the beginnings of his literary career.

— Without making invidious comparisons, it is safe to say that the exhibit which Messrs. Houghton, Mifflin & Co. have arranged in the gallery in the northwestern corner of the Department of Liberal Arts in the Manufacturers' Building at Chicago is in all respects worthy of somewhat careful examination. The idea evidently is to represent such a library as might be found in the house of a man of cultivation in any part of the United States.